

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ralph Fischer on 7/22/2011.

Amendments are as follows:

1-9. (Canceled)

10. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, wherein the method is used for verifying availability of the server in a packet-oriented communication network.

11. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, wherein data is transmitted between the server and the first client and the predefinable other clients by a connectionless switching control.

12. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, wherein the message regarding the availability of the server is transmitted by the first client to the plurality of predefinable other clients using a multicast message.

13. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, wherein the first client sends a message regarding an availability of the server to only the plurality of predefinable other clients within a same subnetwork.

14. (Currently Amended) The method of claim 30 as claimed in claim 9, wherein the first predetermined period of time ~~first client executes the availability request at a time which~~ is predefined by a first timer of the first client. ~~timer.~~

15. (Currently Amended) The method as claimed in claim 14, wherein a the first timer is reset to a predefinable value after the response to the availability request is received by the first client.

16. (Currently Amended) A control program loaded into a random access non-transitory memory of a client and having code comprising:

a first code portion causing the client to check for a receipt of a message regarding a transmission of a server keepalive test by a first client within a first predetermined period of time;

a second code portion configured such that, if no message from the server regarding the transmission of the keepalive test is received by the client within the first predetermined period of time, the client transmits a message regarding a collective request to a plurality of predefineable other clients;

a third code portion configured to transmit an availability request to a server;

a fourth code portion configured to monitor for receipt of a response comprising a confirmation message responding to the availability request if the server is available;

a fifth code portion configured to transmit a message regarding an availability of the server to a plurality of predefinable other clients, the message regarding the availability of the server configured to prevent a transmission of an availability request by any of the predefinable other clients to the server for a predefinable period of time if the confirmation message responding to the availability request is detected by the second device.

~~a first code portion configured to cause the client to check for a receipt of a message regarding a transmission of a server keepalive test by a first client within a first predetermined period of time;~~

~~a second code portion configured such that, if no message from the server regarding the transmission of the keepalive test is received by the client within the first predetermined period of time, the client transmits a message regarding a collective request to a plurality of predefineable other clients;~~

~~a third code portion configured to cause the client to transmit an availability request to the a server;~~

~~a fourth code portion configured to cause the client to monitor for a receipt of a confirmation message responding to the availability request if the server is available;~~
~~and~~

~~a fifth code portion configured to cause the client to transmit a message regarding an availability of the server to a plurality of predefinable other clients, the message regarding the availability of the server configured to prevent a transmission of availability requests by the predefinable other clients to the server for a predefinable period of time.~~

17. (Canceled)

18. (Currently Amended) A client of a communication network comprising:
non-transitory memory having a control program, the control program defining:

a first device causing the client to check for a receipt of a message regarding a transmission of a server keepalive test by a first client within a first predetermined period of time;

a second device configured such that, if no message from the server regarding the transmission of the keepalive test is received by the client within the first predetermined period of time, the client transmits a message regarding a collective request to a plurality of predefineable other clients;

a third device configured to transmit an availability request to a server;

a fourth device configured to monitor for receipt of a response comprising a confirmation message responding to the availability request if the server is available;

a fifth device configured to transmit a message regarding an availability of the server to a plurality of predefinable other clients, the message regarding the availability of the server configured to prevent a transmission of an availability request by any of the predefinable other clients to the server for a predefinable period of time if the confirmation message responding to the availability request is detected by the second device.

19. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, further comprising the first client checking to determine whether the server is at least able to respond to the availability request with an unavailability message if no confirmation message is received by the first client.

20. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, wherein the message regarding the availability of the server is a negative availability message if the server provided an unavailability message or if the server did not respond to the availability request within the third predetermined period of time after the availability request was sent to the server.

21. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, further comprising the first client receiving keep alive data from the predefinable other clients.

22. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, further comprising one of the predefinable other clients transmitting a collective availability request to the server if no message regarding the multicast collective request was ~~has been~~ received by that client within a predefined time period.

23. (Currently Amended) The method of claim 30 ~~as claimed in claim 9~~, further comprising the first client storing keep alive data received from the predefinable other clients.

24. (Cancelled)

25. (Currently Amended) The client of claim 18 wherein the control program also defines another ~~further comprising a fourth~~ device configured to store keep alive data received from the predefinable other clients.

26. (Previously Presented) The client of claim 18 wherein the message regarding the availability of the server is a negative multicast availability message if an availability message is not received from the server within a predetermined time period after the availability request is sent to the server.

27. (Previously Presented) The client of claim 18 wherein the first device comprised of ~~is also the third device and the first device is a transmitter or a~~ transmission mechanism.

28-29. (Cancelled)

30. (Previously Presented) A method for verifying an availability of a server comprising:

checking for a receipt of a message regarding a transmission of a server
keepalive test by a first client within a first predetermined period of time;

if no message regarding the transmission of the keepalive test is received by the first client within the first predetermined period of time, the first client transmitting a message regarding a collective request to a plurality of predefineable other clients;

transmitting an availability request by the first client to the server, the availability request to the server comprising data of the predefineable other clients that responded

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to the message regarding the collective request within a second predetermined period of time;

preventing transmission of any availability requests by the plurality of predefinable other clients to the server for at least a prescribable period of time;

after a third predetermined period of time or after receipt of a response to the availability request sent to the server, the first client transmitting a message regarding an availability of the server to the predefinable other clients that responded to the message regarding the collective requests within the second predetermined period of time.

31. (Previously Presented) The method as claimed in claim 30 further comprising the first client checking for responses to the message regarding the collective request from the predefineable other clients within the second predetermined period of time.

32. (Previously Presented) The method as claimed in claim 30 wherein the message regarding a transmission of a server keepalive test is a multicast collective request from a client that intends to directly send a keepalive request to the server.

33. (Previously Presented) The method of claim 30 wherein the preventing of the transmission of any availability requests by the plurality of predefinable other clients to the server for at least a prescribable period of time is comprised of the predefineable other clients that responded to the message regarding the collective request within the second predetermined period of time checking whether the message regarding an availability of the server is received from the first client within a fourth predetermined period of time.

REASONS FOR ALLOWANCE

2. Claims 10-16, 18-23, 25-27 and 30-33 allowed and renumbered as Claims 1-20.

3. The following is an examiner's statement of reasons for allowance: None of the prior art of record disclose method and program wherein checking for a receipt of a message regarding a transmission of a server keepalive test by a first client within a first predetermined period of time and if no message regarding the transmission of the keepalive test is received by the first client within the first predetermined period of time, the first client transmitting a message regarding a collective request to a plurality of predefineable other clients and transmitting an availability request by the first client to the server, the availability request to the server comprising data of the predefineable other clients that responded to the message regarding the collective request within a second predetermined period of time and then preventing transmission of any availability requests by the plurality of predefinable other clients to the server for at least a prescribable period of time and after a third predetermined period of time or after receipt of a response to the availability request sent to the server, the first client transmitting a message regarding an availability of the server to the predefinable other clients that responded to the message regarding the collective requests within the second predetermined period of time.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOE CHACKO whose telephone number is (571)270-3318. The examiner can normally be reached on Monday-Friday 8:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C./

Examiner, Art Unit 2456

/KEVIN BATES/

Primary Examiner, Art Unit 2456